Researchers explore method to make biofuels partly from seawater

By using synthetic biology, researchers are developing a more efficient and sustainable method to produce the next generation of bio-based jet fuels, which could be partly made from seawater, according to a study released on Thursday by The University of Manchester.

Supported by the U.S.-based Office of Naval Research Global (ONR), researchers from the university's Manchester Institute of Biotechnology (MIB) are carrying out this project.

Scientists have discovered that the bacteria species called Halomonas, which grows in seawater, provides a viable "microbial chassis" that can be engineered to make high value compounds. This means products like bio-based jet fuel could be made economically using production methods similar to those in the brewery industry and using renewable resources such as seawater and sugar, according to the university.

Unlike the biofuels we know today, which are dependent on agricultural land to produce corn and sugar beets, bio-production in seawater would avoid ethical concerns of "fuel vs food", said Dr. Kirk Malone, Director of Commercialization at The University of Manchester's MIB.

Moreover, the final product would be identical to today's fuels, allowing vehicles to maintain the same high performance standards without having to redesign the engine to consume lower quality fuels, said Dr. Malone.

(Taken from Xinhua)

---

https://www.radiohc.cu/en/noticias/ciencias/205268-researchers-explore-method-to-make-biofuels-partly-from-seawater

Radio Habana Cuba